Students at the Texas Academy of Mathematics and Science must pass all courses taken. The below course descriptions are taken from the University of North Texas catalog or supplemental materials provided by the professor.

**BIOL 1711 Honors Principles of Biology I**
An integrated approach to cell and molecular biology with an emphasis on biological chemistry, cell structure and function, Mendelian and molecular genetics, evolutionary biology.

**BIOL 1761 Honors Biology for Science Majors Laboratory**
Laboratory techniques and research methods for introductory biology.

**CHEM 1410 General Chemistry for Science Majors**
Fundamental concepts, states of matter, periodic table, structure and bonding, stoichiometry, oxidation and reduction, solutions, and compounds of representative elements.

**CHEM 1430 Laboratory Sequence for General Chemistry**
Laboratory techniques, weighing, errors and significant figures, identification and purification of substances, and elementary quantitative analysis.

**COMM 1010 Introduction to Communication**
Examination of how communication principles and skills influence our understanding of current social problems such as global climate crisis, health care, and poverty. Focus on communication and community engagement includes experimental learning with community partners. Oral communication skills and collaborative group building skills are emphasized.

**CSCE 1030 Computer Science I**
Introduction to computer science and engineering, problem solving techniques, algorithmic processes, software design and development.

**CSCE 1040 Computer Science II**
Continuation of CSCE 1030. Software Design, structured programming, object-oriented design and programming.

**ENGL 1315 Writing about Literature I**
Writing as a means of critical thinking using readings from poetry and drama as sources for essay topics. Emphasis on the process of perfecting the essay through the writing of several drafts.

**ENGL 1325 Writing about Literature II**
Study of relationship between writing and research with research topics drawn from readings from prose fiction. Emphasis on the process of perfecting the essay through the writing of several drafts.

**HIST 2610 United States History to 1865**
From colonial origins through the Civil War.

**HIST 2620 United States History since 1865**
From the Civil War to the present.
MATH 1650  Pre-Calculus
Preparatory course for calculus: trigonometric functions, their graphs and applications; sequences and series; exponential and logarithmic functions and their graphs; graphs of polynomial and rational functions; general discussion of functions and their properties.

MATH 1710  Calculus I
Limits and continuity, derivatives and integrals; differentiation and integration of polynomial, rational, trigonometric, and algebraic functions; applications, including slope, velocity, extrema, area, volume and work.

MATH 1720  Calculus II
Differentiation and integration of exponential, logarithmic and transcendental functions; integration techniques; indeterminate forms; improper integrals; area and arc length in polar coordinates; infinite series; power series; Taylor’s theorem.

MRTS 2010  Introduction to Media Arts Writing
Introduction to media writing and study of the basic theories, methodologies, techniques, principles and formats for the scripting of narrative and non-narrative media, including “New Media.” Related software for screenplay, television, industrial and multi-media writing is explored. Required writing course for all MRTS pre-majors.

MRTS 2210  Introduction to Media arts Production
Introduction to basic techniques. Audio, television (studio and location) and single-camera video and film methods are investigated. Includes production exercises and experiments.

MRTS 2400  Digital Media Writing
Emphasis on formats, styles, and how to research content/material. Introduction to converged broadcast information writing with emphasis in talk magazine, sports, long-form documentary and news formats.

MRTS 2980  Media Arts Combined
Introduction to each area of the Media Arts program – media history, analysis and production.

MRTS XXXX  Course TBD

PHYS 1710  Mechanics

PHYS 1730  Laboratory in Mechanics
Laboratory to accompany PHYS 1710.

PSCI 2305  US Political Behavior and Policy
Explores the connection between the will of the people and the policies implemented by government by focusing on individual political values and attitudes, the mechanisms that connect individual beliefs to government action (parties, interest groups, the media, and elections), and the outcomes of government policy.

PSCI 2306  US and Texas Constitutions and Institutions
An introduction to the institutions of government, with particular emphasis on the U.S. and Texas Constitutions. Focus on the structure and powers of the three branches of government (both national and Texas); the division of power between those branches (separation of powers); the division of power between the national and state governments (federalism); and issues related to civil rights and civil liberties. Satisfies the legislative requirement for a course emphasizing the Texas constitution.

Updated: February 2020